IN THE CLAIMS

Please amend the claims as follows:

1-15. (Canceled)

16. (Currently Amended) A processing apparatus, comprising:

an encoder configured to encode video and/or audio signals to generate stream files;

a processor configured to generate characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type, the characteristic point information being included in a program information file corresponding to each stream file and being used to access characteristic points when reproducing the stream files; and

a recording unit configured to record the stream files and corresponding program information files containing the characteristic point information respectively in a recording medium.

17. (Previously Presented) The processing apparatus according to claim 16, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

18. (Previously Presented) The processing apparatus according to claim 17, wherein said characteristic point information further includes an I-picture position of the program.

19. (Previously Presented) The processing apparatus according to claim 17, wherein said characteristic point information further includes a silent point of the program.

20. (Currently Amended) A processing apparatus for use in conjunction with a recording device, comprising:

a processor configured to generate characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type, an input video and audio signal; and

a generator ~~configurable~~ configured to generate program information containing the characteristic point information.

21. (Previously Presented) The processing apparatus according to claim 20, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

22. (Previously Presented) The processing apparatus according to claim 21, wherein said characteristic point information further includes an I-picture position of the program.

23. (Previously Presented) The processing apparatus according to claim 21, wherein said characteristic point information further includes a silent point of the program.

24. (Currently Amended) A processing apparatus for use in conjunction with a recording device, comprising:

a processor configured to generate characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from input video and/or audio signals;

a user interface configured to receive a user operation indicative of the user designated position; and

a generator configured to generate program information containing the characteristic point information.

25. (Previously Presented) The processing apparatus according to claim 24, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

26. (Previously Presented) The processing apparatus according to claim 25, wherein said characteristic point information further includes an I-picture position of the program.

27. (Previously Presented) The processing apparatus according to claim 25, wherein said characteristic point information further includes a silent point of the program.

28. (Currently Amended) A processing method, comprising the steps of:

~~an encoding step of~~ encoding video and audio signals to generate stream files;

~~a processing step of~~ generating characteristic point information for the video or audio signals contained in each stream file, the characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute

information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type, the characteristic point information being included in a program information file corresponding to each stream file and being used to access characteristic points when reproducing the stream files; and

~~a recording step of~~ recording the stream files and corresponding program information files containing the characteristic point information respectively in a recording medium.

29. (Previously Presented) The processing method according to claim 28, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

30. (Previously Presented) The processing method according to claim 29, wherein said characteristic point information further includes an I-picture position of the program.

31. (Previously Presented) The processing method according to claim 29, wherein said characteristic point information further includes a silent point of the program.

32. (Currently Amended) A processing method for use in conjunction with a recording device, comprising:

~~a processing step of~~ generating characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from input video and/or audio signals; and

~~a generating step of~~ generating program information containing the characteristic point information.

33. (Previously Presented) The processing method according to claim 32, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

34. (Previously Presented) The processing method according to claim 33, wherein said characteristic point information further includes an I-picture position of the program.

35. (Previously Presented) The processing method according to claim 33, wherein said characteristic point information further includes a silent point of the program.

36. (Currently Amended) A processing method for use in conjunction with a recording device, comprising:

a processing step of generating characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from input video and/or audio signals;

a receiving step of receiving a user operation indicative of the user designated position; and

a generating step of generating program information containing the plural types of characteristic point information.

37. (Previously Presented) The processing method according to claim 36, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

38. (Previously Presented) The processing method according to claim 37, wherein said characteristic point information further includes an I-picture position of the program.

39. (Previously Presented) The processing method according to claim 37, wherein said characteristic point information further includes a silent point of the program.

40. (Currently Amended) A computer program encoded on a computer-readable medium, for performing a processing method, comprising:

~~an encoding step of~~ encoding video and audio signals to generate stream files;

~~a processing step of~~ generating characteristic point information for the video or audio signals contained in each stream file, the characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type, the characteristic point information being included in a program information file corresponding to each stream file and being used to access characteristic points when reproducing the stream files; and

~~a recording step of~~ recording the stream files and corresponding program information files containing the characteristic point information respectively in a recording medium.

41. (Previously Presented) The computer program according to claim 40, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

42. (Previously Presented) The computer program according to claim 41, wherein said characteristic point information further includes an I-picture position of the program.

43. (Previously Presented) The computer program according to claim 41, wherein said characteristic point information further includes a silent point of the program.

44. (Currently Amended) A computer program encoded on a computer-readable medium, for performing a processing method in conjunction with a recording device, comprising:

~~a processing step of~~ generating characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from input video and/or audio signals; and

~~a generating step of~~ generating program information containing the characteristic point information.

45. (Previously Presented) The computer program according to claim 44, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

46. (Previously Presented) The computer program according to claim 45, wherein said characteristic point information further includes an I-picture position of the program.

47. (Previously Presented) The processing method according to claim 45, wherein said characteristic point information further includes a silent point of the program.

48. (Currently Amended) A computer program encoded on a computer-readable medium, for performing a processing method in conjunction with a recording device, comprising:

~~a processing step of~~ generating characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from input video and/or audio signals;

~~a receiving step of~~ receiving a user operation indicative of the user designated position; and

~~a generating step of~~ generating program information containing the characteristic point information.

49. (Previously Presented) The computer program according to claim 48, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

50. (Previously Presented) The computer program according to claim 49, wherein said characteristic point information further includes an I-picture position of the program.

51. (Previously Presented) The computer program according to claim 49, wherein said characteristic point information further includes a silent point of the program.

52. (Currently Amended) A processing apparatus, comprising:

a reproducing unit configured to reproduce stream files containing video and/or audio signals and corresponding management information files recorded on a recording medium;

a processor configured to generate characteristic point information from the management information file corresponding to each stream, the characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type, the characteristic point information being correlated with respective positions of the characteristic point information; and

a controller configured to control reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

53. (Previously Presented) The processing apparatus according to claim 52, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

54. (Previously Presented) The processing apparatus according to claim 53, wherein said characteristic point information further includes an I-picture position of the program.

55. (Previously Presented) The processing apparatus according to claim 53, wherein said characteristic point information further includes a silent point of the program.

56. (Currently Amended) A processing apparatus for use in conjunction with a reproducing device, comprising:

a processor configured to reproduce characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from program information files corresponding to stream files containing video and/or audio signals; and

a controller configured to control reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

57. (Previously Presented) The processing apparatus according to claim 56, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

58. (Previously Presented) The processing apparatus according to claim 57, wherein said characteristic point information further includes an I-picture position of the program.

59. (Previously Presented) The processing apparatus according to claim 57, wherein said characteristic point information further includes a silent point of the program.

60-63. (Canceled)

64. (Currently Amended) A processing method, comprising the steps of:

~~a reproducing step of~~ reproducing stream files containing video and/or audio signals and corresponding program information files recorded on a recording medium;

~~a processing step of~~ generating characteristic point information from the program information file corresponding to each stream, the characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type, the characteristic point information being correlated with respective positions of the characteristic point information; and

~~a control step of~~ controlling reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

65. (Previously Presented) The processing method according to claim 64, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

66. (Previously Presented) The processing method according to claim 65, wherein said characteristic point information further includes an I-picture position of the program.

67. (Previously Presented) The processing method according to claim 65, wherein said characteristic point information further includes a silent point of the program.

68. (Currently Amended) A processing method for use in conjunction with a recording device, comprising:

~~a processing step of~~ reproducing characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from program information files corresponding to stream files containing video and/or audio signals; and

~~a control step of~~ controlling reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

69. (Previously Presented) The processing method according to claim 68, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

70. (Previously Presented) The processing method according to claim 69, wherein said characteristic point information further includes an I-picture position of the program.

71. (Previously Presented) The processing method according to claim 69, wherein said characteristic point information further includes a silent point of the program.

72. (Currently Amended) A processing method for use in conjunction with a recording device, comprising:

~~a processing step of~~ reproducing characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from program information files corresponding to stream files containing video and/or audio signals;

~~a receiving step of~~ receiving a user operation indicative of the user designated position; and

~~a control step of~~ controlling reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

73. (Previously Presented) The processing method according to claim 72, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

74. (Previously Presented) The processing method according to claim 73, wherein said characteristic point information further includes an I-picture position of the program.

75. (Previously Presented) The processing method according to claim 73, wherein said characteristic point information further includes a silent point of the program.

76. (Currently Amended) A computer program encoded on a computer-readable medium, for performing a processing method, comprising:

~~a reproducing step of~~ reproducing stream files containing video and/or audio signals and corresponding program information files recorded on a recording medium;

~~a processing step of~~ generating characteristic point information from the program information file corresponding to each stream, the characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type; and

~~a control step of~~ controlling reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

77. (Previously Presented) The computer program according to claim 76, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

78. (Previously Presented) The computer program according to claim 77, wherein said characteristic point information further includes an I-picture position of the program.

79. (Previously Presented) The computer program according to claim 77, wherein said characteristic point information further includes a silent point of the program.

80. (Currently Amended) A computer program encoded on a computer-readable medium, for performing a processing method in conjunction with a reproducing device, comprising:

~~a processing step of~~ reproducing characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from program information files corresponding to stream files containing video and/or audio signals; and

~~a control step of~~ controlling reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

81. (Previously Presented) The computer program according to claim 80, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

82. (Previously Presented) The computer program according to claim 81, wherein said characteristic point information further includes an I-picture position of the program.

83. (Previously Presented) The computer program according to claim 81, wherein said characteristic point information further includes a silent point of the program.

84. (Currently Amended) A computer program encoded on a computer-readable medium, for performing a processing method in conjunction with a reproducing device, comprising:

~~a processing step of~~ reproducing characteristic point information including a number of streams used by a program, identification information of each stream, [[and]] attribute

information of each stream corresponding to each identification information, and slot information of each stream, a format of the slot information corresponding to a stream type from program information files corresponding to stream files containing video and/or audio signals;

~~a receiving step of~~ receiving a user operation indicative of the user designated position; and

~~a control step of~~ controlling reproduction of said stream files based on the characteristic point information reproduced from the corresponding program information files.

85. (Previously Presented) The computer program according to claim 84, wherein said characteristic point information includes at least one of a start point, an end point, and a scene change point of the program.

86. (Previously Presented) The computer program according to claim 85, wherein said characteristic point information further includes an I-picture position of the program.

87. (Previously Presented) The computer program according to claim 85, wherein said characteristic point information further includes a silent point of the program.